## AMENDMENTS TO THE SPECIFICATION

**Please replace the paragraph at page 16, line 17, with the following rewritten paragraph:**

The digital demodulator 11 includes an error correction circuit and digitally demodulates the inputted digital signal and outputs the demodulated signal to a TS decoder 12. The TS decoder 12 transmits the inputted digitally-demodulated digital signal to a descrambler 14 through an ~~IC~~ POD card section 13 that stores security information on the broadcasting company. Then the descrambler 14 descrambles the digitally-demodulated digital signal, extracts a transport stream signal (hereinafter, referred to as a TS signal) from the descrambled digital signal, and outputs the extracted TS signal to an AV decoder 15. The AV decoder 15 decodes a digital video signal and a digital audio signal from the inputted TS signal, outputs the digital video signal to an RGB processor 16, and outputs the digital audio signal to the low frequency amplifier 20. The RGB processor 16 converts the inputted digital video signal into an RGB video signal, and outputs the RGB video signal to a liquid crystal display 18 through the RGB switch 17. In this case, the RGB switch 17 superimposes an RGB signal generated by an OSD (On Screen Display) controller 19 based on data of the inputted signal level of the broadcasting signal from the controller 50, on the RGB signal from the RGB processor 16, and outputs a resultant superimposed RGB signal to the liquid crystal display 18 as will be described later in detail. Further, the low frequency amplifier 20 includes an A/D converter and converts inputted two channels of digital audio signals into analog audio signals, and outputs the analog audio signals to left and right loudspeakers 22 and 21.

**Please replace the paragraph at page 17, line 15, with the following rewritten paragraph:**

The AGC circuit 30 is configured to include the AGC detector circuit 31 that includes the RF-IF control function, loop filters 32 and 42, an IFAGC register ~~32~~33, an RFAGC register ~~42~~43, pulse width modulators 34 and 44, and low-pass filters 35 and 45. The AGC detector circuit 31 detects the IF signal inputted from the A/D converter 10, determines an operating ratio of an RFAGC to an IFAGC from a level value of the IF signal, generates an RFAGC signal and an IFAGC signal based on the determined ratio, and then, controls an RFAGC loop and an

IFAGC loop, so as to adjust the broadcasting signal inputted at various kinds of inputted signal levels depending on a reception location or a reception channel (e.g., at an inputted signal level difference of about 90 dB when the received broadcasting signal is a terrestrial digital broadcasting signal, and at an inputted signal level difference of about 30 dB for a digital cable) to substantially such a constant amplitude level that the digital demodulator 11 in rear of the AGC detector circuit 31 can correctly demodulate the broadcasting signal. The IFAGC signal from the AGC detector circuit 31 is subjected to time averaging by the loop filter 32 that serves as a predetermined low-pass filter, and a signal value of the resultant IFAGC signal is temporarily stored in the IFAGC register 33. Further, the pulse width modulator 34 modulates a pulse width of the IFAGC signal according to an IFAGC register value stored in the IFAGC register 33 using, for example, a Δ-Σ modulation method, and the pulse width modulated IFAGC signal is transformed to the IFAGC voltage through the bandpass filter 35, and the IFAGC voltage becomes a control signal for controlling the amplification factor of the intermediate frequency amplifier 7. On the other hand, the RFAGC signal from the AGC detector circuit 31 is subjected to time averaging by the loop filter 42 that serves as a predetermined low-pass filter, and a signal value of the resultant RFAGC signal is temporarily stored in the RFAGC register 43. Further, the pulse width modulator 44 modulates a pulse width of the RFAGC signal according to an RFAGC register value stored in the RFAGC register 43 using, for example, the Δ-Σ modulation method, and the pulse width modulated ~~IFAGC~~ RFAGC signal is transformed to the RFAGC voltage through the bandpass filter 45, and the RFAGC voltage becomes a control signal for controlling the attenuation amount of the attenuator 4.

**Please replace the paragraph at page 28, line 25, with the following rewritten paragraph:**

Fig. 12 is a figure showing minimum frequencies $f_{1min}$ and $f_{2min}$, maximum frequencies $f_{1max}$ and $f_{2max}$ in respective frequency ranges FR1 and FR2 obtained by dividing a frequency range into two ranges, and a reception frequency $f_{rec}$, which are used in a television receiver 100 according to a third preferred embodiment of the present invention. The third preferred embodiment is characterized as follows. If an inputted signal level of a digital broadcasting signal is to be detected, attention is paid to a fact that the characteristic shown in Fig. 6 is changed according to a frequency of the broadcasting signal, and the frequency range of all

channels of CATV broadcasting signals is divided into the two ranges, i.e., the first frequency range FR1 and the second frequency range FR2 as shown in Fig. ~~9~~12. In addition, the following approximate functions are calculated.

**Please replace the paragraph at page 29, line 24, with the following rewritten paragraph:**

(c) An approximate function AF42a representing a relationship between the inputted signal level and the IFAGC register value and an approximate function AF42b representing a relationship between the inputted signal level and the RFAGC register value at the maximum frequency $\cancel{f_{1max}}$ $f_{2max}$ in the second frequency range FR2.

**Please replace the paragraph at page 35, line 5, with the following rewritten paragraph:**

As described so far, in the processing for controlling display shown in Fig. 15 according to the third preferred embodiment, when the user views and listens to the digital broadcasting signal, the inputted signal level Pif is calculated using the approximate function corresponding to the minimum frequency within the frequency range FR1 or FR2 included in the frequency of the viewed digital broadcasting signal based on the IFAGC register value. The inputted signal level Prf is calculated using the approximate function corresponding to the minimum frequency within the frequency range FR1 or FR2 included in the frequency of the viewed digital broadcasting signal based on the RFAGC register value. The average value of the inputted signal levels Pif and Prf is calculated as the inputted signal level $P_{fmin}$ of the minimum frequency. In addition, the inputted signal level Pif is calculated using the approximate function corresponding to the maximum frequency within the frequency range FR1 or FR2 included in the frequency of the viewed digital broadcasting signal based on the IFAGC register value. The inputted signal level Prf is calculated using the approximate function corresponding to the maximum frequency within the frequency range FR1 or FR2 included in the frequency of the viewed digital broadcasting signal based on the RFAGC register value. The average value of the inputted signal levels Pif and Prf is calculated as the inputted signal level $\cancel{P_{fmin}}$ ~~of the minimum~~ $P_{fmax}$ of the maximum frequency. Using the inputted signal level $P_{fmin}$ at the minimum frequency in this frequency

range and the inputted signal level ~~Pfmax~~$P_{fmax}$ at the maximum frequency in this frequency range, the inputted signal level Pin is calculated and displayed using the equation (2) by the linear approximation method. Therefore, it is possible to average the errors shown in Figs. 7 and 8 described above, correct the error due to a change in the frequency of the broadcasting signal in light of a frequency deviations from the minimum frequency and the maximum frequency, and detect and display the inputted signal level of the received broadcasting signal with accuracy higher than that of the prior art.

**Please replace the paragraph at page 36, line 18, with the following rewritten paragraph:**

The fourth preferred embodiment is characterized as follows. Attention is paid to facts, as apparent from the graph of Fig. 6, that when an ~~IFAGC~~ RFAGC register value is the maximum value thereof (when an inputted signal level is smaller than a predetermined threshold value (about -6 dBmV in Fig. 6)), only the IFAGC register value is generally changed relative to the inputted signal level and that when the IFAGC register value is not the maximum value thereof (when the inputted signal level exceeds the threshold value), only an RFAGC register value is generally changed relative to the inputted signal level. In the former case, the inputted signal level is detected based on the IFAGC register value. On the other hand, in the latter case, the inputted signal level is detected based on the RFAGC register value. Concretely, the maximum value of measured RFAGC register values is searched. A range of the inputted signal level at which the RFAGC register value is the maximum value thereof (where an attenuation amount of the attenuator 4 shown in Fig. 1 has the minimum value thereof and a gain for a high-frequency signal has the maximum value thereof) is searched, and the searched range is set as a first level range LR1. A range of the inputted signal level, at which the RFAGC register value does not have the maximum value thereof, is set as a second level range LR2. In the first level range LR1, an inputted signal level Pin is calculated using an approximate function AF51 in this range LR1 based on the IFAGC register value. On the other hand, in the second level range LR2, the inputted signal level Pin is calculated using an approximate function AF52 in this range LR2 based on the RFAGC register value.

**Please replace the paragraph at page 46, line 11, with the following rewritten paragraph:**

At step S104, the controller 60 searches the maximum value of the RFAGC register values based on the measured RFAGC register values at the minimum frequency $f_{1min}$ of the first frequency range ~~RF1~~ FR1, and stores the searched maximum value thereof in the data memory 62 as the maximum value of the RFAGC register values within the first frequency range ~~RF1~~ FR1. In addition, the controller 60 searches a range of the inputted signal levels when the RFAGC register value has the maximum value thereof, and sets the searched range as a level range LR11 of the first frequency range ~~RF1~~ FR1. The controller 60 sets the range of the inputted signal level when the RFAGC register value does not have the maximum value thereof as a level range LR12 of the first frequency range ~~RF1~~ FR1. Next, at step S105, the controller 60 searches the maximum value of the RFAGC register values based on the measured RFAGC register values at the minimum frequency $f_{2min}$ in the second frequency range ~~RF2~~ FR2, and stores the searched maximum values thereof within the data memory 62 as the maximum value of the RFAGC register values in the second frequency range ~~RF2~~FR2. In addition, the controller 60 searches a range of the inputted signal levels when the RFAGC register value has the maximum value thereof, and sets the searched range as a level range LR21 of the second frequency range ~~RF2~~ FR2. The controller 60 sets the range of the inputted signal levels when the RFAGC register value does not have the maximum value thereof as a level range LR22 of the second frequency range ~~RF2~~ FR2.

**Please replace the paragraph at page 47, line 8, with the following rewritten paragraph:**

At step S106 shown in Fig. 24, the controller 60 calculates an approximate function AF81a of a relationship of the IFAGC register values to the respective inputted signal levels within the level range LR11 at the minimum frequency $f_{1min}$ within the first frequency range ~~RF1~~ FR1based on the data representing this relationship. At step S107, the controller 60 calculates an approximate function AF81b of a relationship of the RFAGC register values to the respective inputted signal levels within the level range LR12 at the minimum frequency $f_{1min}$ within the first frequency range ~~RF1~~FR1 based on the data representing this relationship. Next, at step S108, the

controller 60 calculates an approximate function AF82a = AF91a of a relationship of the IFAGC register values to the respective inputted signal levels within the level range LR21 at the maximum frequency $f_{1max}$ within the first frequency range ~~RF1~~ FR1and at the minimum frequency $f_{2min}$ in the second frequency range ~~RF2~~ FR2 based on the data representing this relationship. At step S109, the controller 60 calculates an approximate function AF82b = AF91b of a relationship of the RFAGC register values to the respective inputted signal levels within the level range LR22 at the maximum frequency $f_{1max}$ within the first frequency range ~~RF1~~ FR1and at the minimum frequency $f_{2min}$ within the second frequency range ~~RF2~~ FR2based on the data representing this relationship. Further, at step S110, the controller 60 calculates an approximate function AF92a of a relationship of the IFAGC register values to the respective inputted signal levels within the level range LR21 at the maximum frequency $f_{2max}$ within the second frequency range ~~RF2~~ FR2 based on the data representing this relationship. At step S111, the controller 60 calculates an approximate function AF92b of a relationship of the RFAGC register values to the respective inputted signal levels within the level range LR22 at the maximum frequency $f_{2max}$ within the second frequency range ~~RF2~~ FR2 based on the data representing this relationship. Furthermore, at step S112, the controller 60 generates a display control program (Fig. 25) including the calculated approximate functions AF81a, AF81b, AF82a = AF91a, ~~AF82b = AF82b~~ AF82b = AF91b, AF92a, and AF92b, and writes the generated display control program in a program memory 51 of the controller 50, thus finishing the processing for generating the display control program.